## Introduction

Water quality and soil productivity standards are maintained on the Lolo National Forest by applying Best Management Practices (BMP's). This report monitors specific sites where BMP's have been applied and are found to be effective. The practices include watershed management, vegetation manipulation, timber, roads and trails, and fire suppression and fuels management. BMP's are selected on a site-specific basis, depending on physical conditions, economics, and social and technical feasibility.

"The application of best management practices will assure that water quality is maintained at a level that is adequate for the protection and use of the national forest and that meets or exceeds federal and state standards," states the Lolo Forest Plan in Standard No. 15. BMP's are selected during the initial stages of project planning. Timber sale administrators, engineers, resource specialists, or other qualified personnel, implement BMP's during the life of a project.

The intent of this study is to review and evaluate several examples from a full range of BMP's as described in the publications *Water Quality BMP's for Montana Forests* (Logan, 2001), and the *Soil and Water Conservation Practices Handbook, FSH 2509.22* (USDA, 1988). Each BMP example was evaluated, to assure that the practice had been implemented as intended. In addition each BMP was described in terms of effectiveness in protecting water quality.

The study focuses entirely on whether the Best Management Practices performed as they were intended.

This document is the concluding report of an effectiveness-monitoring program started on the Lolo NF in June 2000. Additional monitoring of the Best Management Practices each year is needed to ensure their effectiveness.